

**BULK HIGH THERMAL CONDUCTIVITY FEEDSTOCK AND
METHOD OF MAKING THEREOF**

ABSTRACT OF THE DISCLOSURE

The invention relates to a feedstock material for use in making heat spreaders, comprising a sheet of annealed pyrolytic graphite having a thermal conductivity of greater than 1000 watts/m-K, a size in any dimension of at least 5 cm and a thickness of at least 0.2 mm. In one embodiment, the feedstock is made by hot-pressing a stack of alternate layers of pyrolytic graphite sheets with flat graphite dies for a finished sheet of annealed pyrolytic graphite comprising a plurality of layers being parallel to each other of at least 0.075 degrees per mm of thickness. In another embodiment, the finished sheet of annealed pyrolytic graphite is made by graphitizing a stack of films comprising a high-carbon polymer.